June 29, 2001

To: First Steps Local Planning and Coordinating Councils (LPCCs) and
          Central Reimbursement Office (CRO) Enrolled Providers
          System Point of Entry (SPOEs) and Service Coordinators
From: Jerry Allen, First Steps CRO Project Director
Re: Revised Appendix F to Billing Training Materials: Calculation of Units Encumbered

Attached please find the revised Appendix F to Billing Training Materials: Calculation of Units Encumbered.

As a result of a number of final claims denials, questions have been raised regarding the process by which the new CRO Claims system calculates units. We are providing the attached document which will be a replacement for the existing Appendix F in the Billing Training Material and which will explain the process adopted in the new system .

With issuance of this document we are also allowing time for transition.

That is, by 7/15/01 we will issue and post to the web the procedures and the form providers can use to request an exception to the claims denials and reimbursement for final claims denied associated with the new method of calculation .

Providers will be allowed to request these exceptions and reimbursement for claims denied prior to 8/01/01.

This document is provided to assist providers with the management of services delivered and billed.

Because it is the responsibility of providers to monitor the utilization of services they have been authorized to deliver, it is essential that they receive information on the process by which the total units on an authorization are calculated.

The majority of authorization types are addressed by the information below. However, in the case of Assistive Technology, authorizations are based on fixed dollar amounts for specific items.

Background

The new CRO Claims system (CCG) determines the maximum usage of many types of authorization based on a calculated number of units authorized. For example, an authorization for a service to be rendered 3 times for 1 hour each time would have a total "units authorized" of 12 units (4 15-minute units x 3 visits).

Once all units authorized have been paid, claims are denied with reason code 12, "authorized limit exceeded." With each authorization's listing in CCG (eix), we provide an inquiry function that shows the total number of units authorized and the number of units paid to date. This information is available to providers who call the CRO, as some often do, in order to determine how many more claims will be paid for a particular authorization.

The SPOE software has enormous flexibility in the specification of an authorization's number of units. An authorization can be written for x units, y times per z time period, from a start date to an end date. This flexibility adds a great deal of complexity when calculating the maximum number of units intended to be authorized.

Most of the calculation is fairly simple. Determining precisely (and programmatically) how many weeks, months, quarters or years fall between the start date and end date is another matter.

Usually, the difference in total units authorized that results from a variance of plus or minus a week or month is relatively minor. In some cases, the difference can be quite large, particularly when the authorization is written on a per-month, per-quarter or per-year basis.

Examples:

A. 4 units, 8 times per month from 3/10/01 to 5/25/01

        Totals   96 units, if the date range is rounded to 3 months
                   64 units, if the date range is rounded to 2 months
                   48 units, if the date range is prorated to 1.5 months

B. 2 units, 52 times per year from 2/1/00 to 1/12/01
    (An actual authorization very much like this one raised the issue)

        Totals   52 units, if rounded to 1 year
                 104 units, if rounded to 2 years
                 49 units, if prorated to 0.95 years

Solution

An algorithm for converting a specified date range into a number of weeks, months or years was agreed upon and implemented. An effort was made to keep the algorithm as simple as possible, because the number of units authorized must be calculated each time a claim is edited to determine whether it can be paid.

In order to address the above requirements and considerations the following algorithm has been implemented in CCG:

Two intermediate values are coded.

U = the number of units authorized per single time period. In example A, above, U = 32 (4 units x 8 times per single month). In example b, U = 104 (2 units x 52 times per single year). In finding U, the start and end dates of the authorization and the exact time period specified are ignored. For any authorization, U is an integer that is easily determined.

T = the number of time periods falling between the authorization start date and end date. It is not rounded, and it is determined as follows:

> If start date = end date or the time period is "per auth," then T = 1.
>
> Else
>> T = the number of days between start date and end date, inclusive, divided by 1, 7, 30, 90, or 365, for authorizations per day, per week, per month, per quarter and per year, respectively.

Total Units Authorized = U x T. The number of units per time period multiplied by the number of periods between the start date and end date gives the final answer.

When any remainder exists, the number of units is always rounded up to the next whole number. For instance, 14.01 units should be paid up to 15 units.

This algorithm effectively prorates the units authorized according to the number of days in the authorization's date range, giving the third answer in the examples.

Appendix F – Calculation of Units Encumbered   Revised 6/29/01

In Summary:

The last section above describes the calculation, which simply put is this:

U x T

where

U = the number of units per time period (per auth, per week, per year,…)

T = the number of time periods during the auth, based on the number of days from start date to end date, divided by 7, 30, 90, or 365 to determine weeks, months, quarters, or years, as appropriate.

If the result of U x T is not an integer (0 to the right of the decimal), the value is always bumped up to the next whole unit.

The following are examples:

A. 45 minutes 2 times **per week**, from April 1 to May 31
U = 6 (3 units x 2 times per)
T = 8.7142857... (30 days / 7 days per week)
U x T = 52.2857 ...
Units Authorized = 53

B. 60 minutes 2 times **per month**, from February 1 to May 31 U = 8 (4 units x 2 times per)
T = 4.0 (120 days / 30 days per month)
U x T = 32.0
Units Authorized = 32

C. 30 minutes 5 times **per auth**, from January 1 to December 31 U = 10 (2 units x 5 times per)
T = 1.0 (time period is per auth)
U x T = 10.0
Units Authorized = 10

D. 90 minutes 1 time **per quarter**, from January 1 to January 31 U = 6 (6 units x 1 time per)
T = 0.34444... (31 days / 90 days per quarter)
U x T = 2.06666...
Units Authorized = 3